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## Ptinidae of China I. - Subfamily Dorcatominae (Coleoptera: Bostrichoidea: Ptinidae)

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**Abstract.** Ptinidae are represented by 66 species in China, from which only 5 species belong to the subfamily Dorcatominae; 3 species are from Taiwan - *Byrrhodes tomokunii* Sakai, 1996, *Mizodorcatoma sibirica* (Reitter, 1879) and *Protheca plicatipennis* (Pic, 1912) and 2 species are from continental China - *Stagetus sydowi* (Reitter, 1913) and *Stagetus yunnanus* Pic, 1911. Other 3 species are newly described - *Dorcatoma* (*D.*) *becvari* sp. nov., *Caenocara villosa* sp. nov. and *Stagetus chinensis* sp. nov.

#### INTRODUCTION

China with its area of more than 9.6 mil. km² is the 3<sup>rd</sup> biggest country of the world and is situated in temperate, subtropical and tropical zones. According to zoogeographical classification belongs to the Palaearctic Region, however southern provinces have fauna more similar to Oriental Region. The fauna of China is known very poorly; only 66 species were recorded from China, from them 49 species come from the continental China and 22 come from Taiwan. Twelve species have cosmopolitan distribution, 17 are endemic to the continental China and 10 come from Taiwan (see tab.1). With regards to area and climatic and natural condition it is very presumable that number of know species of Ptinidae from China is very high. From 13 subfamilies 10 subfamiles are known from China.

The first complete data on China's Ptinidae were published at some world or Palaearctic catalogues - Gemminger & Harold (1869), Pic (1912a,b), Winkler (1927). Only one catalogue on China's Ptinidae was published at that time (Wu 1937). Over just few last years a complete lists of Ptinidae of China was published, according to the province distribution (Borowski 2007; Hua 2002, Zahradník 2007b) but unfortunately some other publications about beetles in different parts of China, f.e. Li J. (1992) or Li H. (1992), are mostly in Chinese language, so the use of information is rather limited.

#### MATERIAL AND METHODS

The subfamily Dorcatominae is represented by more than 50 genera world-wide. I have studied an original description of all the Chinese Dorcatominae (Pic 1911, 1912c; Reitter, 1879, 1913; Sakai 1996) and materials which I have provided with by my colleagues. *Stagetus sydowi* (Reitter, 1913) was placed in the genus *Mesothes* Mulsant et Rey, 1864 and later in *Lasioderma* Stephens, 1835, but after studying the type it was returned to *Stagetus* (Zahradník 2007a).





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# I use the following abbreviations in the paper:

CH China

Higher provinces classification
CE Central Territory
NE Northeast Territory
NO Northern Territory
NW Northwest Territory

SE Southeastern Territory (including Macao and Hongkong)

SW Southwestern Territory

WP Western Plateau

# Provinces, autonomous regions or municipalities, and Taiwan

ANH	Anhui (Anhwei)	CE
BEI	Beijing (Peking or Peiping)	NO
CHQ	Chongquing	SW
FUJ	Fujian (Fukien)	CE
GAN	Gansu (Kansu)	NO, NW
GUA	Guandong (Kwantung)	SE
GUI	Guizhou (Kweichow)	SW
GUX	Guangxi (Kwangsi)	SE
HAI	Hainan	HAI
HEB	Hebei (Hopeh)	NO
HEI	Heilongjiang (Heilungkiang)	NE
HEN	Henan (Honana)	NO
HKG	Hongkong	SE
HUB	Hubei (Hupeh)	CE
HUN	Hunan	CE
JIA	Jiangsu (Kiangsu)	CE
JIL	Jilin (Kirin)	NE
JIX	Jiangxi (Kiangsi)	CE
LIA	Liaoning	NE
MAC	Macao	SE
NIN	Ningxia (Ningsia)	NO
NMO	Nei Mongol (Inner Mongolia)	NO, NW
QIN	Qinghai (Tsinghai)	WP, NW
SCH	Sichuan (Szechwan)	SW,WP
SHA	Shaanxi (Shensi)	NO
SHG	Shanghai	CE
SHN	Shandong (Shantung)	NO
SHX	Shanxi (Shansi)	NO
TAI	Taiwan (Formosa)	TAI
TIA	Tianjin (Tsiensin)	NO
XIN	Xinjiang (Sinkiang)	NW
XIZ	Xizang (Tibet)	WP
* ** ** *		0777

SW





YUN

Yunnan

# LIST OF THE CHINESE SPECIES

#### Gibbiinae

Gibbium aequinoctiale Boieldieu, 1854

FUJ, GUA, GUI, GUX, HEN, HKG, HUB,

HUN, JIX, SCH, YUN

Gibium psylloides Czenpinski, 1775

LIA, TAI

#### Ptininae

Cyphoniptus sulcithorax (Pic, 1899)

GUI, GUX, HEN, SHA, SCH, XIZ, YUN,

ZHE TAI

Kedirinus albidiceps (Pic, 1914) Mezioniptus impressicollis Pic, 1944

GAN, JIA, JIX, NIN, NMO, QIN, XIN,

ZHE FUJ

TAI

Myrmecoptinus deplanatus (Pic, 1954) Myrmecoptinus kuronis (Ohta, 1930) Myrmecoptinus sauteri (Pic, 1914)

TAI

Niptus hololeucus (Faldermann, 1835) Pseudeurostus hilleri (Reitter, 1877)

CE, NE, NO, NW; HKG, SHG ANM, FUJ, GAN, GUA, GUI, HEB, HEI,

HEN, HUB, HUN, JIA, JIL, JIX, LIA, NIN, NMO, QIN, SCH, SHA, SHX, SNH,

ZHE

Ptinus (Cyphoderes) japonicus Reitter, 1877

ANH, GAN, GUX, HEB, HEN, HUB,

HUN, JIA, JIX, NMO, SCH, SHX

XIN

Ptinus (Gynopterus) sexpunctatus Panzer, 1789

CE; ANH, JIA, JIX, GUX, HUN, SCH,

TAI

Ptinus (Ptinus) fur (Linnaeus, 1758) Ptinus (Ptinus) latro Fabricius, 1775

CE; GAN, NMO, QIN, XIN HUN, NMO, SCH, XIN

Ptinus (Ptinus) villiger (Reitter, 1884)

Ptinus (Tectoptinus) exulans Erichson, 1842

Ptinus (Tectoptinus) tectus Boieldieu, 1856

NO; HEB, HUB, HUN, LIA, SHX

Sphaericus (Sphaericus) pinguis (Wollaston, 1854) Trigonogenius globosus (Solier, 1849)

CH CH

# Anobiinae

Anobium punctatum (DeGeer, 1774)

HKG

Falsogastrallus elongates Pic, 1931

YUN

Falsogastrallus sauteri Pic, 1914

FUJ, GUA, GUX, HKG, JIA, JIX, SCH,

TAI

Gastrallus immarginatus (P. W. J. Müller, 1821)

HEI, JIL, LIA

Gastrallus testaceicornis Pic, 1922

TAI

Gastrallus tuberculatus Pic, 1914

TAI

Hadrobregmus pertinax (Linnaeus, 1758)

HEI, JIL, LIA





Holcobius japonicus (Pic, 1903)

Microbregma emarginatum (Duftschmid, 1825)

HEI, JIL

Nicobium castaneum (Olivier, 1790) FUJ, GUI, JIA, LIA, TAI

Oligomerus japonicus Sakai, 1982 LIA

Oligomerus ptilinoides (Wollaston, 1854) HEI, JIL, LIA

Pseudoligomerus hummeli Pic, 1933 GAN

Stegobium paniceum (Linnaeus, 1758) AHN, BEI, FUJ, GAN, GUA GUI, GUX,

HAI, HEB, HEI, HEN, HKG, HUB, HUN, JIA, JIL, JIX, LIA, MAC, NIN, NMO, QIN, SCH, SHA, SHG, SHN, SHX, TAI,

TIA, XIN, XIZ, YUN, ZHE

Trichodesma (Trichodesma) kurosawai Sakai, 1986 TAI

#### **Dorcatominae**

TAI Byrrhodes tomokunii Sakai, 1996 HEB Caenocara villosa sp. nov. Dorcatoma (Dorcatoma) becvari sp. nov. YUN Mizodorcatoma sibirica (Reitter, 1879) TAI Protheca plicatipennis (Pic, 1912) TAI Stagetus chinensis sp. nov. SHA Stagetus sydowi (Reitter, 1913) JIA. SHG Stagetus yunnanus Pic, 1911 YUN

# Dryophilinae

Ptilineurus marmoratus (Reitter, 1877) AHN, GUA, GUI, GUX, HEB, HEI, HEN,

HUB, HUN, JIA, JIL, JIX, LIA, NMO,

SHA, SCH, SHN, SHX, TAI, YUN

HUB, JIA, SCH, SHA

#### Ernobiinae

Ernobius mollis (Linnaeus, 1758) HEI, JIL, LIA, TAI

Xestobium rufovillosum (DeGeer, 1774) HKG

Ptilineurus pictipennis (Fairmaire, 1895)

#### Eucradinae

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Anhedobia capucina (Reitter, 1877) LIA
Clada (Clada) babai Sakai, 1987 TAI
Clada (Clada) formosana Sakai, 1987 TAI

Clada (Clada) insulcata Pic, 1933 ANH, GAN, YUN

Clada (Clada) maxima (Pic, 1903)

Clada (Clada) vittula Sakai, 1987

TAI

Clada (Taiwanoclada) shibatai Sakai, 1987

Hedobia atricolor Pic, 1926

Hedobia minor Pic 1926

Hedobia multipunctata Pic, 1944

GAN









#### Mesocoelopodinae

Mesothes substriatus Pic, 1938 JIX Pseudomesothes pulverulentus latior (Pic, 1954) FUJ

#### Ptilininae

Indanobium formosanum Kôno et Kim, 1937 TAI

Ptilinus fuscus (Geoffroy in Fourcroy, 1785) GAN, LIA, NMO, QIN, XIN

Ptilinus pectinicornis (Linnaeus, 1758) HUB, JIX Yunnanobium longicorne (Pic, 1907) SCH

# Xyletininae

Ladsioderma serricorne (Fabricius, 1792) AHN, FUJ, GUA, GUI, GUX, HEI, HEN,

HKG, HUB, HUN, JIA, JIL, JIX, LIA,

TAI, ZHE

Neoxyletinus angustatus (Pic, 1907) YUN Neoxyletinus tibetanus (Gottwald, 1977) XIZ

Xyletinus (Xeronthobius) kozlovi Emetz

in Emetz et Logvinovskiy, 1977 NMO

Xyletinus (Xeronthobius) ocularis Reitter, 1901 NMO

Xyletinus (Xyletinus) asiaticus Reitter, 1901 NMO

Xyletinus (Xyletinus) chinensis Frivaldszky, 1892 CH

Tab. 1. Review of Chinese Ptinidae

Subfamilies	Number of species						
	T	С	P	ССН		TAI	
				СН	E	TAI	E
Gibbiinae	2	1	1	2	0	1	0
Ptininae	17	7	2	11	2	4	1
Anobiinae	15	2	5	12	2	6	2
Dorcatominae	8	0	0	5	5	3	2
Dryophilinae	2	0	0	2	1	1	0
Ernobiinae	2	1	1	2	0	1	0
Eucradinae	10	0	0	6	5	4	4
Mesocoelopodinae	2	0	0	2	2	0	0
Ptilininae	4	0	2	3	0	1	1
Xyletininae	7	1	0	7	3	1	0
Together	69	12	11	52	20	22	10

C - cosmopolitan; CCH - continental China; CH - China; E - endemic; P - Palaearctic wide; T - total number; TAI - Taiwan







#### DESCRIPTION OF NEW SPECIES

# Dorcatoma (Dorcatoma) becvari sp. nov. (Figs 1a-c)

**Type material.** Holotype (3): China, Yunnan, Heishu, 35 km N of Lijang, 127.13 N, 100.19 E, 1.-19.vii.1992, S. Bečvář lgt. Paratypes (9 33, 10 9): the same data as holotype. All are deposited in author's collection.

**Description.** Male (holotype). Shortly oval, transversally convex, body length 2.8 mm, greatest width 1.7 mm. Ratio length:width of elytra 1.0. Black, pubescence white, short, sparse, semierect. Antennae, palpi and legs rusty brown, the last three antennomeres piceous black.

Head evenly convex, shining, coarsely and densely punctuate, diameter of punctures slightly smaller than distance between punctures. Eyes rounded, globular, without triangular edge. Front 2.1 times wider than width of eye in dorsal view. Antennae consist of eleven antennomeres. The first is robust, 3 times longer than wide, the 2<sup>nd</sup> rounded, from the 3<sup>rd</sup> to 8<sup>th</sup> very small, slightly transverse, the 9<sup>th</sup> 1.1 times longer than wide, the 10<sup>th</sup> slightly serrated, 1.6 times longer than wide, the 11<sup>th</sup> oval, three times longer than wide. The last maxillary palpi twice longer than wide, clubbed.

Pronotum transverse, ratio length:width 0.4, the widest on the base. Surface shinning, with very dense and fine punctuate. Lateral margin from dorsal view invisible. Anterior angle from lateral view sharp, posterior angle blunt, rounded. Pubescence inclined forward. Scutellum 1.5 times wider than long, transversally oval.

Elytra shortly oval, shining, densely and coarsely punctuated, puncture almost touching. Semierect pubescence irregular, on lateral margin inclined backwards. Each elytron with two deep lateral striae, the 1<sup>st</sup> going almost to the end of elytron, the 2<sup>nd</sup> ending in the 1/5 before the end of elytron.

Median longitudinal furrow of metasternum missing.

All visible abdominal sternites not fused, very finely and densely punctuate, with recumbent very short and dense pubescence, inclined backwards.

Aedeagus see Fig 1a.

**Variability.** Body length 2.6 - 2.9 mm; greatest width 1.6-1.7 mm. Antennae more or less darken.

Female. 9th and 10th antennomeres less serrated.

**Differential diagnosis.** This species differs from all other species of subgenus *Dorcatoma* Herbst, 1792 by piceous (almost black) colour of the last three antennomere, by shape of two penultimate antennomeres, which are more emarginate. Pubescence is shortly semierect, other species of this subgenus have pubescence recumbent. The shape of aedeagus is also characteristic.

**Name derivation.** Dedicated to the collector of the type material and my friend Stanislav Bečvář.







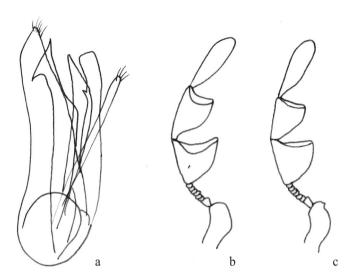


Fig. 1. Dorcatoma (Dorcatoma) becvari sp. nov.: a- aedeagus; b- antenna of male; c- antenna of female.

Caenocara villosa sp. nov. (Figs 2a-c)

**Type material.** Holotype (♂): China, Hebei, Qinglong, 17.vi.2001, 40.4 N, 118.9 E, J. Turna lgt. Deposited in author's collection.

**Description.** Male (holotype). Very shortly oval, convex, body length 1.9 mm, greatest width 1.5 mm. Ratio length:width of elytra 0.85. Piceous black, pubescence white, long, sparse, erect. Antennae, palpi and legs yellowish rusty red. The first antennomere darken.

Head transversally evenly convex, shining, coarsely and densely punctuate, distance between these puncture smaller than their diameter. Pubescence inclines forwards, on the clypeus is dense, on the other part of head is sparse. Eyes relatively small, almost rounded, longitudinally separated in the middle by edge into two parts; this edge with sparse short erect setae. Front 3.5 times wider than diameter of eye (from dorsal view). Antennae consist of 9 antennomeres. Scapus large, longer than  $2^{\rm nd}$  -  $7^{\rm th}$  antennomeres, pedicel shortly longer than wide,  $3^{\rm rd}$  -  $5^{\rm th}$  antennomeres shortly wider than long,  $7^{\rm th}$  transversally triangular, 1,8 times wide than long,  $8^{\rm th}$  and  $9^{\rm th}$  slim,  $8^{\rm th}$  three times longer than wide, on the apex straight cut of,  $9^{\rm th}$  three times longer than wide, on apex rounded (Fig 2b). Terminal palpomere of maxillary palpi triangular, on the base slightly emarginated (Fig 2c).

Pronotum strongly transverse, ratio length: width 0.45, transversally strongly convex, shinning, coarsely and densely punctuated, distance between these puncture smaller than their diameter. Pubescence inclined forwards, on the lateral margin slightly inclined to sides. Lateral margin (from lateral view) with sharp margin, anterior angle sharp, posterior angle obtuse. Scutellum pentagonal, shortly longer than wide.

Elytra wider than their length, shining, coarsely and densely punctuated, distance between these puncture smaller than their diameter. Pubescence irregular, mostly inclined backwards.





Each elytron with three lateral striae; the first two extend almost to the end of elytra, the 3<sup>rd</sup> from lateral margin extend only to half of elytra. The 1<sup>st</sup> is in the middle enlarged. Interstriae coarsely punctuate.

Sternites of aedeagus coarsely and densely punctuated, distance between these puncture smaller than their diameter; sparsely erected pubescence, inclined backwards.

Aedeagus see Fig 2a.

Female, Unknown,

**Differential diagnosis.** This species is very similar to *C. subglobosa* (Mulsant et Rey, 1864) - both have enlarged lateral striae on elytra - from this it differs by less shining pronotum and elytra, more distinct punctuation, triangular shape of the last segment of maxillary palpi (*C. subglobosa* has elongate sharp end), and shape of aedeagus.

Name derivation. Derived from Latin word "villosus". It means recumbent pubescence.

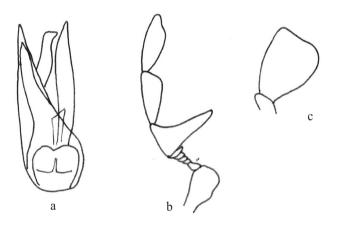


Fig. 2. Caenocara villosa sp. nov.: a-aedeagus; b- antenna of male; c- the last segment of maxillary palpi.

Stagetus chinensis sp. nov. (Figs 3a-b)

**Type material.** Holotype (♂): China, Shaanxi, Lueyang, 4.-6.vi.2004, E. Kučera lgt. Deposited in author's collection.

**Description.** Male (holotype). Shortly oval, convex, body length 2.6 mm, greatest width 1.7 mm. Ratio length:width of elytra 1.2. Dark brown, pubescence yellow-white, long, dense, erected. Head red-brown, antennae, palpi and legs rusty.

Head very densely and coarsely punctuated, shining, puncture almost touching. Pubescence very dense, inclines forwards. Eyes almost rectangular (from dorsal view), with longitudinal sharp roofed break. Front 1.9 times wider than width of eye from dorsal view. Antennae consist of eleven antennomeres. The 1<sup>st</sup> is robust, the 2<sup>nd</sup> slightly longer than wide,







the 3<sup>rd</sup> rounded, the 4<sup>th</sup>, 6<sup>th</sup> and 8<sup>th</sup> slightly pectinate, the 5<sup>th</sup> and 7<sup>th</sup> strongly pectinate. The last three antennomeres enlarged, the 9<sup>th</sup> antennomere strongly serrated,1.3 times wider than long, the 10<sup>th</sup> antennomere triangular, slightly serrated, twice as long as wide, the last antennomeres oblong oval, 2.5 times longer than wide (Fig 3b). The last segment of maxillary palpi triangular.

Pronotum transverse (length 0.8 mm, width 1.1 mm), transversally strongly convex, shinning, with coarse and dense umbilicate punctures, distance between punctures larger than their diameter. Pubescence erect, inclined forwards. Lateral margin of pronotum rounded, not obvious. Base of pronotum curved. Scutellum cordiform, the same length as width.

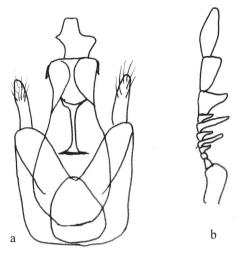


Fig. 3. Stagetus chinensis sp. nov.: a- aedeagus; b- antenna of male.

Elytra shinning, without distinct shoulders. Each elytron with ten very fine striae, two lateral striae are strong and deep. Intervals between striae with double punctuation – the first is sparse and coarse, distance between punctures the same as puncture diameter; these punctures intermixed with fine and dense ones. Intervals between striae 5 times wider than striae. Pubescence inclined backwards, denser on the end of elytra.

Aedeagus see Fig. 3a.

Female. Unknown.

**Differential diagnosis.** This species differs from other species of the genus *Stagetus* Wollaston, 1861 by shape of antennae; 5<sup>th</sup> and 7<sup>th</sup> are pectinate, 4<sup>th</sup>, 6<sup>th</sup> and 8<sup>th</sup> slightly pectinate. The shape of the aedeagus is also different.

Name derivation. Derived from name of the country, place of its distribution.

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